

CMOS IMAGE SENSOR FORMED ON AN N-TYPE SUBSTRATE

ABSTRACT OF THE DISCLOSURE

A pixel sensor cell used in a CMOS image sensor is disclosed. The cell includes a pinned photodiode formed in a Pwell that is formed in an N-type semiconductor substrate. A transfer transistor is placed between the pinned photodiode and an output node. A reset transistor is coupled between a high voltage rail V_{dd} and the output node. Finally, an output transistor with its gate coupled to the output node is provided.